

**Windstorm damage and microsite colonization in pristine pine forests in Urho Kekkonen National Park, eastern Lapland.**

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In late autumn 1985, two strong winds touched down in Eastern Lapland, causing major damage to pristine pine forests of Urho Kekkonen National Park. In order to obtain information about the extent of damage and the postblowdown recruitment of seedlings, permanent sample plots were established in the most heavily affected area. The fate of naturally germinated seedlings was monitored to examine growth patterns and causes of mortality of seedlings in storm-mediated microsites. The first record of the recruitment on mound-pit complexes took place in 1990, and the last one in 2000. The most extensive and heaviest damages were found on windward slopes, where stand densities were reduced by more than 80 %. The uprooting of trees exposed mineral soil and lead to the formation of new microsites on the forest floor. In these microsites, new pine seedlings emerged in early 1990s and again in the end of the decade. A major part of the seedlings found on mound-pit complexes were killed by winter conditions, summer drought or erosion of root plate. Due to the low recruitment and high mortality, new seedlings established during the study period will not compensate for the fallen trees. The results of this study indicate that the recovery of pine forests in the northern boreal zone is a slow and long-lasting process.